

REMARKS

The present communication is responsive to the Official Action mailed July 18, 2003. A petition for a three-month extension of the term for response to said Official Action, to and including January 18, 2004, is transmitted herewith.

With reference to the election and restriction requirement, non-elected claim 1 has been canceled without prejudice.

In response to the objection to the drawings, paragraph 0038 of the specification has been amended to include previously omitted reference numerals 60a, 60b and 60c. Paragraph 0053 of the specification has been amended to include previously omitted reference numeral 366. Reference numeral 68 in Fig. 3 already appears in the specification at the first line in paragraph 0038. Numeral 13 in Fig. 12 is, in fact, a section line indicator referred to at paragraph 0033 of the specification. Reference numeral 220 of Fig. 12 already appears at the seventh line in paragraph 0051 of the specification. Accordingly, no further correction to the specification and drawings is believed necessary with respect to assertedly omitted reference numerals 68 (Fig. 3), 13 (Fig. 12) or 220 (Fig. 12). It is, thus, believed that the objection to the drawings has been overcome.

The title has been amended to read -- SEMICONDUCTOR PACKAGE WITH HEAT SINK -- in light of the newly-presented claims discussed below.

Claim 2 was rejected under 35 U.S.C. § 103 as unpatentable over *Dozier, II et al.*, U.S. Patent 5,772,451 in view of *Sado*, U.S. Patent 4,402,562. Reconsideration and withdrawal of this rejection are respectfully requested.

Before addressing the merits of the § 103 rejection, it is noted that present claim 2 is believed to be substantially

identical to an issued claim in applicant's parent case, now U.S. Patent 6,265,765. Applicant would be willing to cancel such claim to avoid any question of double-patenting once the § 103 rejection is withdrawn. For the reasons set forth below, it is believed that the § 103 rejection is in error.

Firstly, the Official Action relies upon *Dozier* as disclosing a structure including numerous elements of the claim, including a "substantially imperforate dielectric element 310." The dielectric element of *Dozier*, however, manifestly is not "substantially imperforate," but, in fact, includes open "plated through holes 312." (Col. 22, lns. 38-42.) The rejection, thus, fails to meet the recitation of a "substantially imperforate dielectric element overlying the substrate" set forth in paragraph (b) of the claim.

Additionally, the rejection relies upon a combination of *Dozier* with *Sado* as supposedly showing the desirability of adding a "compliant layer" in the assembly of *Dozier*. However, the combined teachings of the references do not suggest use of a "compliant layer . . . supporting the dielectric element above the subassembly," as recited in claim 2 paragraph (c). *Sado* is a "press-contact type interconnector." (Abstract.) *Sado's* connector is physically engaged between two opposed elements such as "between two printed circuit boards 4 and 5" depicted in Fig. 3. (Col. 3, lns. 65 et seq.) *Sado's* connector includes electrical conductors incorporated in what *Sado* refers to as a "rectangular connecting piece 1," held between "holder members 2 and 3" bonded together with one another. The holder members 2 and 3 are either resilient or rigid; they may be "plastic resins, rubbery elastomers, glasses, ceramics and the like." (Col. 3, lns. 40-46.) In the *Sado* system, it is "essential" that the conductive element or "rectangular connecting piece 1 is extended out of the surfaces of holder numbers 2 and 3." (Col. 3, lns. 49-51.) Thus, the clear and unambiguous teaching

of *Sado* is that the structure formed by the "holder members 2 and 3" must not contact the mating elements engaged with the connector; it must remain spaced from the mating elements, just as structure 2 and 3 is spaced from mating circuit boards 4 and 5 in Fig. 3 of the reference. Even if an artisan were motivated to incorporate *Sado's* holder 2 and 3 surrounding the asserted leads 320 of *Dozier*, that holder would be positioned only on the middle portions of such leads and would remain remote from the asserted subassembly 304 and remote from the asserted dielectric element 310. Such a holder could not meet the recitation of present claim 2, calling for a compliant layer "supporting the dielectric element above the subassembly," as set forth in paragraph (c) of the claim. In the combined structure posited by the Official Action, the supposed compliant layer (the holder) would be spaced apart from the dielectric element and would not support the dielectric element above the subassembly. For these reasons, the teachings of the references, even if combined with one another, would not meet the recitations of present claim 2. It is, therefore, respectfully requested that the § 103 rejection be withdrawn with respect to claim 2.

New claims 3-9 have been presented. These claims are supported, *inter alia*, by Figs. 10 and 11 of the present drawings, and by the disclosure at paragraphs 0038-0049 of the present specification. Fig. 10 shows the assembly inverted with respect to the directions referred to in claim 3. The "heat sink" referred to in paragraph (c) of claim 3 is indicated at element 164 of Fig. 10. The "chip carrier" is shown as element 152, and the chip is shown as element 120. The "metallic element" referred to in new claim 8 is exemplified at element 126 of Fig. 10 and element 126' of Fig. 11, whereas the "side walls" of claim 9 are shown in Fig. 10.

A Supplemental Information Disclosure Statement is transmitted herewith.

As it is believed that all of the objections and rejections set forth in the Official Action have been fully met, favorable reconsideration and allowance are earnestly solicited.

If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that she telephone applicant's attorney at (908) 654-5000 in order to overcome any additional objections which she might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

Dated: January 7, 2004

Respectfully submitted,

By 

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